DOCUMENT RESUME

ED 412 035 RC 021 151

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TITLE	Overcoming Persistent Poverty--and Sinking into It. Income Trends in Persistent-Poverty and Other High-Poverty Rural Counties, 1989-94.
INSTITUTION	Wisconsin Univ., Madison. Dept. of Rural Sociology.
SPONS AGENCY	Department of Agriculture, Washington, DC.
PUB DATE	1997-07-24
NOTE	38p.; Paper presented at the Annual Meeting of the Rural Sociological Society (Toronto, Ontario, Canada, August 1997). Contains maps that will not reproduce adequately.
CONTRACT	43-3AEN-4-80098
PUB TYPE	Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Differences; *Income; *Low Income Counties; Minority Groups; *Nonmetropolitan Areas; Poverty; *Poverty Areas; *Regional Characteristics; Rural Areas; Rural Population
IDENTIFIERS	*Economic Trends

ABSTRACT

In 1989, 31.6 percent of the rural poor lived in persistent-poverty counties (those with poverty rates exceeding 20 percent for every decennial census year since 1960), and an additional 12.6 percent lived in "new" high-poverty counties. While this represents less than half the rural poor, high and persistent poverty is of particular concern to policy makers because it results in inadequate resources to support public services such as education, and in economic and social milieux that depress the aspirations, expectations, and development of young people. This paper draws on the decennial censuses and on the Census Bureau's newly released Small Area Income and Poverty Estimates for 1993 to examine recent income and poverty trends in U.S. nonmetropolitan counties. Results suggest that, in general, economic conditions were improving in persistent-poverty and new high-poverty counties in the early 1990s. Trends differed regionally, with improvements concentrated in Appalachia and the Southeast and deteriorating conditions mostly west of the Mississippi River. Between 1989 and 1994, real per capita income declined in only 26 of the 535 persistent-poverty counties and in 31 of the 232 new high-poverty counties. Most counties with declining income were remote from urban centers, had high proportions of Hispanics or Native Americans, had high rates of natural increase (excess of births over deaths), or were disproportionately dependent on agriculture. Includes maps and data tables. (SV)

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ED 412 035

OVERCOMING PERSISTENT POVERTY - AND SINKING INTO IT
Income Trends in Persistent-poverty and Other High-poverty Rural Counties 1989-94

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July 24, 1997

ABSTRACT

Post-1990 income and population trends in persistent-poverty and other high-poverty counties suggest that, in general, economic conditions are improving in those counties. Spatial patterns of change with respect to poverty concentration resemble those of the 1960s and 1970s rather than those of the 1980s. Trends differ regionally. Improvements are concentrated in the East, while trends are more mixed in the Southwest, the Ozarks, and the upper Midwest. The intercensal county poverty estimates for 1993, recently released by the Census Bureau, are consistent with the general changes suggested by the income trends, but the regional patterns in the two data sources are not entirely consistent.

Paper presented at the Annual Meeting of the Rural Sociological Society,
Toronto, Ontario, August 1997

This research was supported through a cooperative agreement (43-3AEN-4-80098) between the United States Department of Agriculture Economic Research Service and the University of Wisconsin College of Agriculture.

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RC 021157

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INTRODUCTION

The poor are not distributed evenly with the nonpoor across the landscape. They are disproportionately concentrated in the centers of large cities and in rural areas remote from urban centers. Thus, for example, county poverty rates in 1989 (based on the 1990 census) varied from less than 2.5 percent to over 60 percent. The spatial pattern of poverty concentration evidences considerable stability over time. In 535 nonmetro counties (almost one fourth of all nonmetro counties), poverty rates have exceeded 20 percent in each decennial census year since 1960 (Cook and Mizer 1994). In addition to these persistent-poverty counties, 232 other nonmetro counties had poverty rates in excess of 20 percent in 1989, although they had poverty rates lower than 20 percent in at least one of the earlier census years. Most of these "new" high-poverty counties (171 out of 232) had poverty rates in excess of 20 percent in 1959 and 1969, "escaped" from persistent-poverty status in 1979, but returned to high poverty in 1989.

Just under one third of the rural poor (31.6 percent) lived in the persistent-poverty counties in 1989, and an additional 12.6 percent lived in the new high-poverty counties (i.e., counties with 1989 poverty rate in excess of 20 percent, but not classified as persistent-poverty). Although this represents less than half of the rural poor, the high-poverty counties are of particular concern to policy-makers for several reasons. Where poverty rates are very high, resources of local government, local business, and local social networks are often inadequate to provide public services such as health and education, and to support families and individuals with serious income inadequacies. Also, high concentrations of poverty can result in economic, social and cultural milieux that depress aspirations and expectations of young people, making it difficult for them to develop to their full potential. For these reasons, a number of Federal programs are targeted to high-poverty counties, and several Federally supported regional commissions focus resources and efforts on multi-county areas of concentrated poverty.

It is of considerable interest, therefore, to know whether economic well-being in the high- and persistent-poverty rural counties has improved, deteriorated, or remained unchanged since the 1990 census. Little light can be shed on the question by projecting trends of earlier decades

forward because changes in the 1980s differed markedly from those of the previous two decades. During the 1960s and 1970s rural poverty rates declined substantially. Of the 2,249 rural counties with poverty rates in excess of 20 percent in 1959, only 1,220 persisted in the high-poverty category through 1969, and the number declined further to 646 by 1979. However, this trend did not continue into the 1980s. In general, rural poverty rates remained more or less unchanged during the 1980s, and the number of persistently poor counties declined more slowly, falling only to 535 by 1989. This decline was more than offset by the 171 counties that reverted to high poverty in 1989 after having escaped from persistent-poverty status in 1979.

Data on poverty at the county level has, up until now, been available only once every ten years, based on the decennial census. However, county-level income and population data are available annually from the Bureau of Economic Analysis. Here I draw on those data to provide a picture of household economic trends in the persistent-poverty and new high-poverty counties during the five years following the 1990 census. I also use a newly available data source on intercensal county poverty rates. The Census Bureau recently released 1993 county-level poverty estimates as the first product of their new Small Area Income and Poverty Estimates series. Although there are many uncertainties about the reliability of these estimates, I present them as a check on the trends revealed by the per capita income data. The following questions motivated this research:

(1) Are the persistent-poverty counties falling farther behind other nonmetro counties, or are they holding their own or gaining ground?
(2) Are the new high-poverty counties falling farther behind other nonmetro counties, perhaps to become additional peristent-poverty counties, or were their high poverty rates in 1989 temporary?
(3) Do the spatial patterns of change in rural economic well-being resemble those of the 1960s and 1970s, or those of the 1980s?
(4) Are there regional differences in the post-1990 income trends in the persistent-poverty and new high-poverty counties?
(5) Are there persistent-poverty or new high-poverty counties where income trends point to serious economic deterioration that may indicate a need for special policy attention?

DATA AND METHODS

Poverty data are from the decennial censuses of 1960, 1970, 1980 and 1990. These data refer to poverty status in the calendar year prior to the respective census, thus 1959, 1969, 1979, and 1989, although the county of residence of the household is recorded in April of the census year. Income and population data for 1969, 1979, 1989, and 1994 are from the Bureau of Economic Analysis Regional Economic Information System (BEA/REIS) 1969-94 income data file. Income figures from 1969, 1979, and 1989 were adjusted for inflation to 1994 dollars using the personal consumption expenditure index (PCE).[1] Income growth and decline rates are presented as ten-year (1969-79) and five-year (1989-94) rates adjusted for inflation, not as annualized rates.

Poverty data for 1993 are from the Census Bureau's newly released Small Area Income and Poverty Estimates. These estimates are produced using rather complex weighted regression techniques based on a wide range of data sources including decennial census data, Current Population Survey data, intercensal population estimates, BEA income data, and administrative data from tax returns and welfare programs. Caution must be exercised in use of these poverty estimates. Confidence intervals (as published by the census bureau) are quite large, and the poverty estimates are not directly comparable with those produced by the decennial census because they are based on slightly different populations and concepts of income. This makes comparisons of *changes* in poverty rates from 1989-93 particularly problematic. In spite of these limitations, I used the 1993 poverty estimates to verify trends observed in the income data.

I drew on a variety of data sources to characterize counties and categories of counties of particular interest: Natural increase rates and international inmigration rates for the period July 1990 to July 1994 were based on the U.S. Bureau of the Census Population estimates 1990-95 data file. These are four-year rates (since 1989-90 data were not on that file). Mid-period

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[1]The personal consumption expenditure index handles housing costs somewhat differently than does the consumer price index, and yields slightly lower inflation estimates, especially for periods prior to 1990. Inflation estimates of the two indices from 1979 to 1989 differ by 3.38 percentage points, and from 1989 to 1994, by only 0.62 percentage points.

population (average of 1990 and 1994) was used as the denominator in these calculations. Data on employment by industrial sector are from the Bureau of the Census Summary Tape File 3C, 1990.

Virginia independent cities were combined with their surrounding counties to provide units similar to counties in the rest of the nation. Additionally, a small number of counties in other States were combined with neighboring counties to provide consistent units among the three data sources and among the years of analysis. All data were aggregated within the multi-county units.

Unless otherwise noted, nonmetro counties include all counties not in standard metropolitan statistical areas as of 1993. Nonmetro counties were further disaggregated using the ERS rural-urban code, which classifies nonmetro counties into six categories based on size of urban population and adjacency to a metropolitan area (in accordance with Butler and Beale 1994). Persistent-poverty counties were identified in accordance with Cook and Mizer (1994). Additional counties with poverty rates in excess of 20% in 1989 are denominated "new high-poverty counties." Comparisons are made to "other" nonmetro counties, i.e., to nonmetro counties not classified as either persistent-poverty or new high-poverty.

FINDINGS

Income Trends

Income trends from 1989 to 1994 indicate that the persistent-poverty counties as a group have done rather well (table 1). Per capita income, adjusted for inflation, grew 10.7 percent in the persistent-poverty counties, more than twice the growth rate in the "other" nonmetro counties (i.e., nonmetro counties not classified as either persistent-poverty or high-poverty). Of the persistent-poverty counties, 77 percent experienced per capita income growth higher than the national nonmetro average, and 40 percent had income growth greater than twice the national nonmetro average.

In the new high-poverty counties (i.e., counties with 1989 poverty rate higher than 20 percent, but not classified as persistent-poverty), income growth was only moderately higher than that in the "other" nonmetro category (6.7 percent compared with 5.1 percent). The distribution of

the new high-poverty counties among per capita income-change categories was very similar to that for other nonmetro counties, with just a modest over-representation in the highest-growth category.

Per capita income, adjusted for inflation, declined in 26 of the persistent-poverty counties and in 31 of the new high-poverty counties. In most of those counties the decline was not large, and the income trend would perhaps be better characterized as stagnant than declining. Nevertheless, it seems likely that the high poverty rates in almost all of those counties have at least persisted, if not increased. Many of the new high-poverty counties that have experienced declining real income may be in the process of becoming persistent-poverty counties of the future.

Per capita income grew, but at less than the national nonmetro average (6.15 percent) in 96 persistent-poverty counties and in 69 of the new high-poverty counties. The implications for poverty rates in those counties depend on the rate of income growth and on how the distribution of income has changed.

The large proportion of persistent-poverty counties in the two highest income-growth categories suggests that poverty rates have declined in a substantial majority of the persistent-poverty counties. This must be true for almost all those with income growth more than twice the national nonmetro average, for most of those with income growth between one and two times the national nonmetro average, and for at least some of those with income growth less than the national average. If these trends continue through the rest of the decade, quite a number of these counties will escape persistent-poverty status.

Regional Trends

Income change in the persistent-poverty counties during the first half of the 1990s followed a fairly strong spatial pattern (map 1). With only a few exceptions, real per capita income increased in the persistent-poverty counties of Appalachia, the Black Belt (from the Carolinas to Mississippi), the lower Mississippi River Valley, and in the predominantly Native American persistent-poverty counties of the Southwest, northern Great Plains, and Alaska. Further, income growth in a substantial majority of those counties exceeded the national nonmetro

average. On the other hand, in the persistent-poverty counties across the Ozark-Ouachita Plateau, in the Rio Grande Valley, and on the high plains of the Southwest, per capita income growth was less robust and a substantial number of counties experienced declines. Farther west and north, per-capita income declined in two counties in northern Montana, and one in southwestern Idaho. In the two Montana counties, a majority of the poor are Native Americans.

The same general pattern characterized the new high-poverty counties (map 2). Of the 31 new high-poverty counties with declining real per capita income during the period 1989-94, only 4 were located east of the Mississippi River. With the exception of one county in Ohio, all the new high-poverty counties in Appalachia experienced increasing per capita income, most at rates higher than the national nonmetro mean. There were only a few new high-poverty counties in the Black Belt and the lower Mississippi River Valley, and almost all of them recorded income growth higher than the national nonmetro rate. Across the Ozark-Ouachita Plateau and on the high plains of the Southwest, the pattern was mixed, with a number of declining-income counties. Finally, per capita income declined in a dozen or so new high-poverty counties scattered across the upper Midwest and the inter-mountain West. In only one of those (Rosebud County, Montana) is the poor population predominantly Native American.

It appears, then, that the pattern of spatially concentrated poverty may be shifting westward. The counties that are likely to escape from high-poverty status are disproportionately in the Appalachian Mountains and the Southeast, while the persistent-poverty and new high-poverty counties with deteriorating economic conditions are almost all west of the Mississippi River.

Caveat on Inferring Changes in Poverty Rate from Changes in Per-capita Income

I have been cautious in inferring that increasing per-capita income has translated into declining poverty rates. County poverty rates depend on family structure and on the distribution of income among families as well as on average income. Further, not all income recorded by BEA is included in the income used to calculate poverty rates. In particular, part of government outlays for medicare, medicaid, and food stamps are included in BEA income, but not in poverty income.

During the decade from 1979 to 1989, the last period for which we have reliable county poverty rate data, the aggregate nonmetro poverty rate increased 1.3 percentage points (from 15.8 percent to 17.1 percent) in spite of an increase in real per capita income of 11.3 percent. Similarly, in the persistent-poverty counties the aggregate poverty rate increased 1.8 percentage points (from 26.9 percent to 28.7 percent) while real per capita income increased 11.0 percent. For the period under study here, 1989-94, although county-level poverty data are not available, national nonmetro poverty statistics from the Current Population Survey indicate that the nonmetro poverty rate increased 0.7 percentage points from 1989 to 1994. As noted above, per capita income increased 6.15 percent in nonmetro areas during the same period.[2]

It is not known to what extent the association between change in income and change in poverty at the national nonmetro level holds in the high-poverty counties. Thus, in the assessment in the previous section, I have not assumed that poverty rates have gone down in all counties with increasing income. Nevertheless, the large proportion of counties with income growth much higher than the national nonmetro mean is adequate grounds for the conclusion proffered, that

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[2]At least four factors contributed to the phenomenon of increasing poverty in spite of increasing per capita income:

(1) Poverty thresholds are adjusted by the Census Bureau using the consumer price index, whereas I have used the personal consumption expenditure index to adjust for inflation in calculating per capita income growth. Using the CPI to adjust for per capita income growth would lower the 1979-89 per capita income growth rates by about 2.2 percentage points and those for 1989-94 by about 0.5 percentage points.

(2) Government transfers for medicare, medicaid, and food stamps increased as a proportion of total income. These are included in income as reported by BEA, but are not included as income in calculating the poverty rate.

(3) Average household size decreased from 2.8 persons in 1979 to 2.6 persons in 1989. From 1989 to 1994 it remained about constant at 2.6 persons. Because of assumed economies of scale, more income is required to keep the same number of persons above the poverty line if they are in smaller households.

(4) Distribution of income among households became more unequal during the 1980s and early 1990s (see U.S. Bureau of the Census 1996).

poverty is declining in a substantial majority of the persistent-poverty counties. At the other extreme, the national-level associations of poverty change and income change are grounds for concern that poverty rates may be increasing substantially in those counties with declining per capita income, even in counties where the decline is not large.

Poverty rate changes 1989-93, based on Small Area Income and Poverty Estimates

As a partial check on the concerns about inferring poverty rate changes from per capita income changes I also analyzed poverty rate changes from 1989-93 using the first release of intercensal county poverty estimates from the Census Bureau's new Small Area Income and Poverty Estimates program. Because of the large confidence intervals associated with these data, other uncertainties about their reliability, the slightly different time reference (only 1993 estimates are presently available, whereas income change was measured through 1994), and problems of comparability with census-based estimates, they by no means provide a definitive verification. Nevertheless, they provide at least some additional information that may improve our assessment of changes in the high-poverty counties in the early 1990s.

Poverty rate changes in the persistent-poverty counties from 1989-93 were generally consistent with the 1989-94 pci changes in the Southwest, in Texas, and in the upper Midwest (map 3).[3] Poverty rate declines in the Southern Highlands, the lower Mississippi River Valley, and the Black Belt were less pervasive than would be expected based on the changes in income, and more counties than expected registered increasing poverty. The three persistent-poverty counties in Montana and Idaho with declining per capita income from 1989-94 showed poverty rate declines in excess of three percentage points from 1989-93.

For the nonmetro counties classified as new high-poverty counties in 1989 also, the 1993 poverty estimates were broadly consistent with the trends seen in the income data (map 4).

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[3]To identify counties with substantial poverty increase and decrease from 1989-93 I used category boundaries of -3 percentage points and +1 percentage points. According to Census Bureau documentation, the intercensal estimates understate poverty rates as measured by the decennial census methodology by about one percentage point. The -3/+1 boundaries, then, correspond approximately to real changes of -2/+2 percentage points.

Regionally, the two sources are reasonably concordant in the Southwest, but compared with the income trends, the 1993 poverty rates indicate fewer counties with worsening economic conditions in the Midwest and Northwest and more in the central Appalachians.

The intercensal poverty estimates, then, provide mixed support for the patterns of change in economic well-being implied by changes in per capita income in the high-poverty counties. The poverty trends are broadly consistent with the income trends in that for both persistent-poverty and new (in 1989) high-poverty categories, counties registering declining poverty rates outnumbered those registering increasing poverty rates about two to one (based on the conservative -3 and +1 percentage-point category boundaries). The regional patterns are less consistent, however. Both data sources point to some improvement in economic well-being in the lower Mississippi River Valley and to worsening economic conditions in a number of high-poverty counties in the Southwest, especially in New Mexico and western Texas. In the Appalachians and the Black Belt, on the other hand, poverty trends do not at all reflect the improving economic conditions suggested by the income trends.

Spatial patterns of poverty and income change, 1959-94

To understand current spatial patterns of change in the high-poverty counties, it is helpful to relate them to patterns of change over the previous decades. Of particular interest is the question of whether changes in the early 1990s follow the spatial pattern of the 1960s and 1970s or that of the 1980s.

In the 1960s and 1970s, two patterns can be observed. First, overall rural poverty declined substantially (table 2). The unweighted mean poverty rate of counties that were nonmetro in 1963 declined from 36.6 percent in 1959 to 22.3 percent in 1969, and to 16.6 percent in 1979. The means are nearly the same if only counties that were nonmetro in 1993 are considered. If we consider that the high-poverty areas are like islands in a lake, with higher-poverty counties toward the center of the islands, we would expect that this general decline in rural poverty would result in counties at the fringes of the high-poverty areas "escaping" from persistent poverty, analagous to the edges of the islands being covered by rising water. To operationalize this concept I calculated a measure of proximate poverty for each census year. Proximate

poverty can be thought of as the average poverty rate of a county's near neighbors. It is calculated as follows:

$$PROXPOV_{jy} = SUM_i (POVRATE_{iy} / DISTANCE_{ij}^3) / SUM_i (1 / DISTANCE_{ij}^3)$$

[i not equal to j]

where:

$PROXPOV_{jy}$ is the proximate poverty measure for county j in year y

i refers to all counties except j

$POVRATE_{iy}$ is the poverty rate of county i in year y

DISTANCEij is the distance from the centroid of county i to the centroid of county j

Map5 (with PROXPOV based on 1989 poverty rates) illustrates that the measure does, in fact, represent the gradient of concentrated poverty declining from the core of high-poverty areas outward.

To test the hypothesis that the counties that escaped from high poverty in the 1960s and 1970s did so, in general, as a result of the "rising rural economic tide" of those decades, I compared the mean of the proximate poverty variable for the counties escaping from persistent poverty with the mean for those that remained persistently poor through each decade (table 3). All counties nonmetro at the beginning of the decade were included in the analysis for that decade, and the proximate poverty measure for the beginning of the decade was used in each case. As expected, those persisting in high poverty had the highest mean proximate poverty, placing them primarily at the core of the high-poverty areas. Those that were not persistently poor at the beginning of the decade had the lowest mean proximate poverty, and the mean for those counties that escaped from persistent-poverty status were mid-range, indicating their location at the fringes of the high-poverty areas.

This first pattern, of general rural economic improvement, was good news for high-poverty rural areas in the 1960s and 1970s, but there was even more good news. Although economic conditions improved in general across rural America, they improved more in the higher-poverty areas than in other areas. Change in poverty rate in both of those decades was correlated negatively and quite strongly with poverty rate at the beginning of the decade, both

in nonmetro counties as a whole and among the persistent-poverty counties (table 4).[4] Further analysis (not shown) confirmed that the reduction in poverty rate was more than proportional for nonmetro counties in the 1970s and for persistent-poverty counties in both decades. That is, not only was the percentage-point decline in poverty rate greater for higher-poverty counties, but the proportional decline in poverty rate was greater as well. This pattern also is reflected in the BEA/REIS income data. Change in real per capita income from 1969 to 1979 (in percent) was positively correlated with 1979 poverty rate, with r = .36 for all nonmetro counties and r = .42 among persistent-poverty counties. The outcome of this pattern of disproportionate improvement in economically distressed areas can be seen in the declining spatial autocorrelation of poverty). The correlation of county poverty rate with proximate poverty declined substantially in both decades, falling from .902 in 1959 to .819 in 1979.

Poverty rates and poverty rate changes of the counties escaping from persistent-poverty status during the 1960s and 1970s provide further confirmation of these two patterns (table 5). Poverty rates in the counties that escaped from persistent-poverty status during the 1960s declined an average of 13.5 percentage points - substantially less than the 17.9 percentage point decline in the counties that remained in persistent poverty. What distinguished the escapees was their much lower poverty rate at the beginning of the decade, not unusually strong economic improvement during the decade. Declines in poverty rates were much smaller in the counties not classified as persistent-poverty at the beginning of the decade. The same pattern is apparent in the 1970s.

In the 1980s both of these patterns disappeared or were greatly attenuated. The mean poverty rate of nonmetro counties increased by about one percentage point from 1979 to 1989, and that of persistent-poverty counties increased about 1.5 percentage points (table 2). Although, as in the previous two decades, the counties escaping from persistent-poverty status were at the fringes of the high-poverty cores (table 3), those counties represented a much smaller

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[4]In table 3 nonmetro and persistent-poverty categories are constant across decades (based on 1993 metro delineation and persistent-poverty status through 1989). The patterns are quite robust, however; very similar results are obtained if 1963 and 1959 definitions are used, or if the categories are delineated by metro and persistent-poverty status in each decade.

proportion of persistent-poverty counties than in the previous two decades, and were more than offset by the 223 counties (also generally at the high-poverty fringe) that either entered high-poverty status for the first time in 1989 or re-entered high-poverty status after having escaped from persistent-poverty in 1969 or 1979. By way of comparison, the corresponding numbers of counties entering or reentering high-poverty in 1969 and 1979 were 5 and 32. The negative correlation of poverty change with pre-existing poverty rate declined from -.81 to -.12 (table 4). The correlation of change in real per capita income with pre-existing poverty rate declined to .12 for all nonmetro counties and to -.02 for persistent-poverty counties. Finally, the spatial auto-correlation of poverty remained almost constant from 1979 to 1989.

Now, what is the spatial pattern of economic change in rural areas in the early 1990s? Overall, Current Population Survey data indicate that the nonmetro poverty rate increased somewhat from 1989 to 1993, then declined in 1994 to about the 1989 level (Nord 1996). The correlation of change in poverty rate 1989-93 with 1989 poverty rate was -.41 for all nonmetro counties, and -.45 for persistent-poverty counties (table 4). These correlations are only about half as strong as those for the 1970s, but are much stronger than they were in the 1980s. The correlation of change in per capita income 1989-94 with 1989 poverty rate was .30, only slightly lower than that for the 1970s. Taking into consideration the higher reliability of the income estimates and the fact that the poverty change measurement period does not include the 1993-94 changes, when rural poverty rates generally declined, it appears that recent spatial trends in economic well-being resemble those of the 1960s and 1970s rather than those of the 1980s. There is reason, then, for at least cautious optimism that the rural revival in population change and migration identified by rural demographers (Cromartie 1996; Fuguitt and Beale 1996) is associated with improving rural economic conditions, and that the high- and persistent-poverty rural areas are sharing in this improvement.

Characteristics of Persistent-poverty and New High-poverty Counties with Declining Income

Although most of the high-poverty counties appear to be experiencing improving economic conditions, some continue to face serious economic challenges. To understand those counties and their economic challenges better, I focus attention in this final section on the 26 persistent-poverty counties and 31 new high-poverty counties in which real per capita income declined from 1989 to 1994.

The high-poverty counties that experienced declining per capita income during the period 1989-94 do not fit the popular stereotype of rural regions in general decline. Population declined during the period in only 10 of these counties (out of a total of 57), and the decline was substantial in only two of the persistent-poverty counties (-6.7 percent in McPherson, SD; -5.4 in Ouachita, AR) and two of the new high-poverty counties (-6.0 percent in Keya Paha, NE; -4.4 in Culberson, TX). Mean population growth was 7.0 percent in the persistent-poverty counties with declining per capita income and 10.2 percent in the new high-poverty counties with declining per capita income - population growth rates well above the national nonmetro average of 4.2 percent.

Most, but not all, of the declining-income high- and persistent-poverty counties have one or more of the following characteristics:

(1) They are remote from urban centers;

(2) They have a high proportion of Hispanics and Native Americans;

(3) They have high rates of natural increase (excess of births over deaths);

(4) They are disproportionately agricultural.

Of the 26 persistent-poverty counties with declining per capita income, none has an urban area with population of 20,000 or more, and only three are adjacent to metropolitan counties (table 5). More than half are in the most rural category, i.e., not adjacent to any metropolitan county and lacking any population center of 2,500 persons. The new high-poverty counties with declining per capita income are less remote than the persistent-poverty counties, as measured by ERS rural-urban categories, but are, nonetheless, disproportionately remote compared with nonmetro counties in general. The proportion in the two most rural categories (48.4 percent) is substantially higher than the overall nonmetro proportion in those categories (34.0 percent). By contrast, the distribution of the persistent-poverty and new high-poverty counties with per capita income growth higher than the national nonmetro mean was very similar to that of all nonmetro counties.

Beale (1993) assigns persistent-poverty counties to racial-ethnic subcategories based on the predominance of a racial or ethnic group in the poor population. Black, Hispanic, and Native American (including Alaskan Natives) categories are persistent-poverty counties in which more

than half of the poor in 1989 were of the respective race-ethnicity, or in which the poverty rate would have been below 20 percent without the race-ethnic group. The Southern Highland category consists of persistent-poverty counties in the Appalachian, Ozark, and Ouachita mountains. Among the persistent-poverty counties with declining per capita income, the Hispanic and Native American counties are heavily overrepresented while black counties are underrepresented. Of the persistent-poverty counties with declining per capita income, nine (34.6 percent) are in the Hispanic category, three are in the Native American category (11.5 percent), and six (23.1 percent) are in the black category. Among all persistent-poverty counties the corresponding proportions are 13.6 percent Hispanic, 6.2 percent Native American, and 46.7 percent black. Further, the proportion of the poor population who are Hispanic and Native American in those counties is high, ranging from 35 to 99 percent and exceeding 50 percent in 14 of the 26 counties. Southern highland persistent-poverty counties make up about 20 percent of all persistent-poverty counties and a similar proportion of those with declining per capita income.

Among the new high-poverty counties with declining per capita income the predominance of Hispanics and Native Americans also is notable, although somewhat less so than in the persistent-poverty counties. In about one third of these counties (10 out of 31), Hispanics or Native Americans make up 40 percent or more of the poor, whereas only one county has a similarly high proportion of blacks among its poor.

In spite of the predominance of Hispanic counties in the high-poverty-declining-income categories, only four of these counties recorded substantial rates of international inmigration. Just two persistent-poverty counties and two new high-poverty counties had four-year international inmigration rates in excess of three percent.

A high rate of natural increase with resulting high youth dependency tends to lower per capita income. It is not surprising, then, to find that many of the persistent-poverty counties with declining per capita income had high rates of natural increase. Over the four-year period 1990-94, the aggregate nonmetro rate of natural increase was 1.6 percent. In the persistent-poverty counties with declining per capita income, the rate was 2.1 percent, and in the new high-poverty counties with declining per capita income it was 3.2 percent. In 12 of the 26

persistent-poverty counties with declining per capita income the rate of natural increase exceeded twice the nonmetro average, and this was true in 12 of the 31 new high-poverty counties with declining per capita income. A large majority of these very high natural increase counties (18 of 24) had predominantly Hispanic or Native American populations.

Many, though by no means all, of the high-poverty-declining-income counties have higher shares of employment in agriculture, forestry, and fisheries than does the average nonmetro county. This is not surprising because these sectors offer employment opportunities to persons with relatively low levels of education and work experience, and wage rates are generally low in these sectors. In the average nonmetro county in 1990, 10.8 percent of employment was in the agriculture, forestry, and fisheries sectors. In 62 percent of the persistent-poverty counties with declining per capita income, the employment share in agriculture, forestry, and fisheries exceeded the nonmetro mean, and 31 percent had employment shares in that sector higher than twice the national nonmetro mean. The corresponding proportions were similar in the new high-poverty counties with declining per capita income (68 percent and 35 percent).

For the high-poverty counties with the highest rates of per capita income decline - especially for the persistent-poverty counties - the characteristics described above (excluding population decline and international inmigration) predominate and coincide. Of the ten persistent-poverty counties with the most precipitous income declines, all ten had net natural increase rates higher than twice the national nonmetro mean, all ten had Hispanic or Native American population shares among the poor in excess of 35 percent - eight in excess of 50 percent, and nine had employment shares in agriculture, forestry, and fisheries higher than the national mean - seven higher than twice the national mean.

These characterizations of the high-poverty-declining-income counties are by no means adequate explanations of their declining per capita income however. Twenty-two of the counties (39 percent), including three predominantly black and three predominantly Hispanic counties, had neither very high rates of net natural increase, nor very high shares of employment in agriculture, forestry, and fisheries, nor substantial population decline, nor substantial international inmigraion. Very likely the income decline in many of these counties is associated with characteristics, events, or processes (or measurement errors) more or less

unique to the county, and not consistent with a general pattern. The high-poverty-declining-income counties are listed in the appendix, and I invite readers with local knowledge of any of these counties to provide additional information about social, economic, and demographic processes in those counties.

SUMMARY

Per-capita income trends in the persistent-poverty and new high-poverty counties during the five years since the 1990 census are generally quite encouraging. Per capita income grew 10.7 percent (adjusted for inflation) in the persistent-poverty counties, well above the all-nonmetro growth rate of 6.15 percent. The general spatial trends in income change during the period resemble those of the 1970s in that income rose more rapidly in the higher-poverty counties. It is likely that poverty rates have declined in a majority of the persistent-poverty counties. If these trends continue through the rest of the decade, a substantial number of these counties will have poverty rates below 20 percent by the 2000 census, thus escaping persistent-poverty status.

In a small number of persistent-poverty counties, however, real per capita income declined during the period 1989-94. Income also declined in 31 "new" high-poverty counties (i.e., counties with 1989 poverty rate higher than 20 percent, but not classified as persistent-poverty counties). Some of these counties are probably in the process of becoming the persistent-poverty counties of the future. Many, though not all, of the persistent-poverty and new high-poverty counties with declining per capita income have the following characteristics: remoteness from urban centers, high proportions of Hispanic or Native American population, high rates of natural increase, and high employment share in agriculture, forestry, and fisheries. Very few of the high-poverty-declining-income counties had substantial population loss or substantial international inmigration.

Income trends in the high-poverty counties followed a fairly strong regional pattern. The persistent-poverty counties with high rates of per capita income growth are located disproportionately in the Appalachian Mountains and the Southeast, while those with deteriorating economic conditions are almost all west of the Mississippi River. The pattern of spatially concentrated poverty appears to be shifting westward, and to be shifting away from

predominantly black areas toward areas with high proportions of Hispanics and Native Americans.

Newly released intercensal poverty estimates for 1993 confirm the general improvement in economic well-being in the high-poverty counties, although they are not wholly consistent with the regional pattern observed in the income data. Uncertainty about reliability and comparability of the new poverty estimates and the shorter time period they cover suggest weighting their evidence less heavily than that of the income data at the present time.

REFERENCES

Beale, Calvin. 1993. "Poverty Is Persistent in Some Rural Areas," *Agricultural Outlook AO200*, September.

Butler, Margaret A., and Calvin L. Beale. 1994. *Rural-Urban Continuum Codes for Metro and Nonmetro Counties, 1993*. Economic research Service, U.S. Department of Agriculture, Staff Report No. AGES 9425.

Cook, Peggy J., and Karen L. Mizer. 1994. "The Revised ERS County Typology: An Overview," *Rural Development Research Report*, No. 89. Washington, DC: Department of Agriculture Economic Research Service.

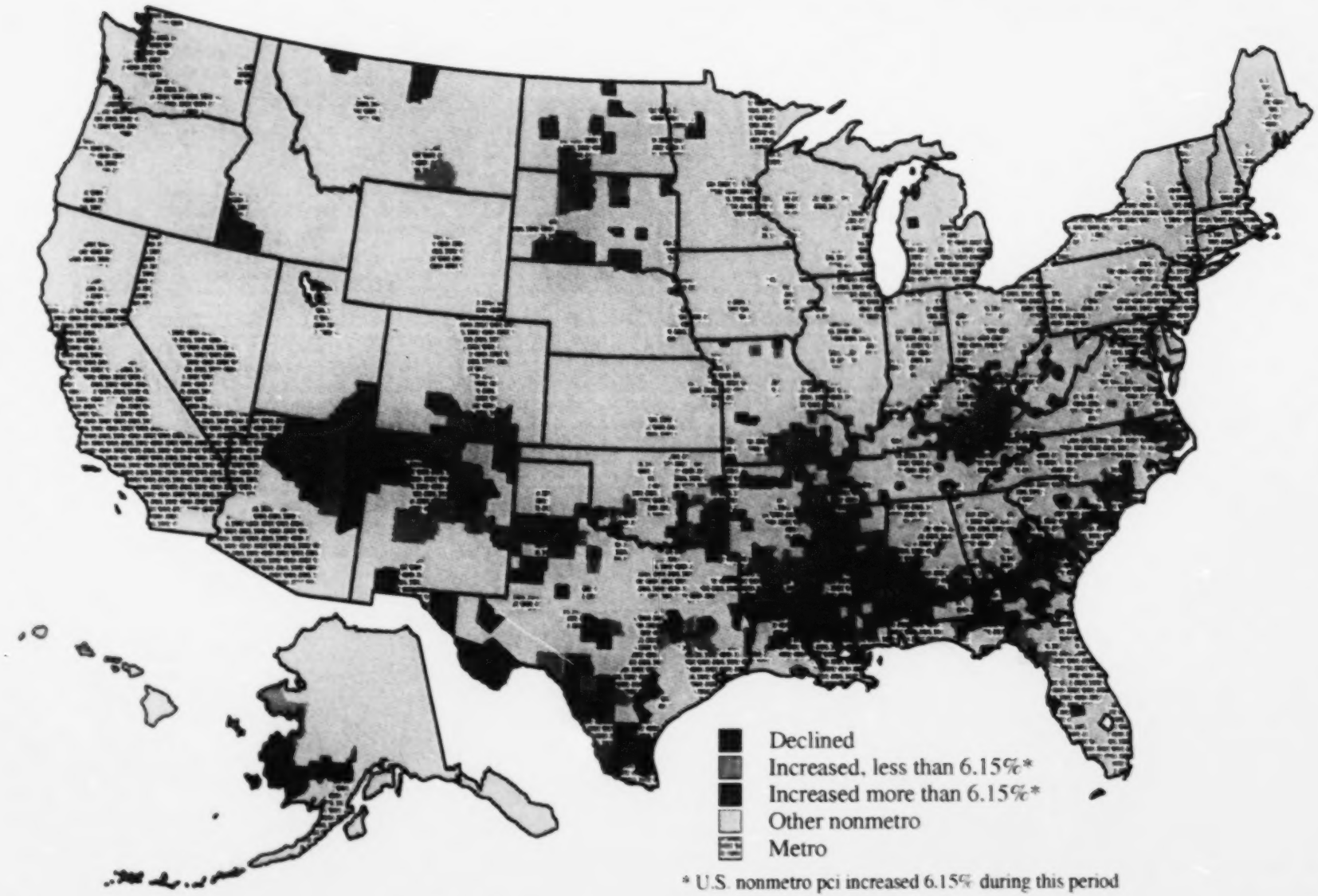
Cromartie, John B. 1996. "Higher Inmigration, Lower Outmigration Contribute to Nonmetro Population Growth," *Rural Conditions and Trends* 7(3):13-17.

Fuguitt, Glenn V., and Calvin L. Beale. 1996. "Recent Trends in Nonmetropolitan Migration: Toward a New Turnaround?" *Growth and Change* 27:156-174.

Nord, Mark. 1996. "Rural Poverty Rate Stabilizes," *Rural Conditions and Trends* 7(3):37-39.

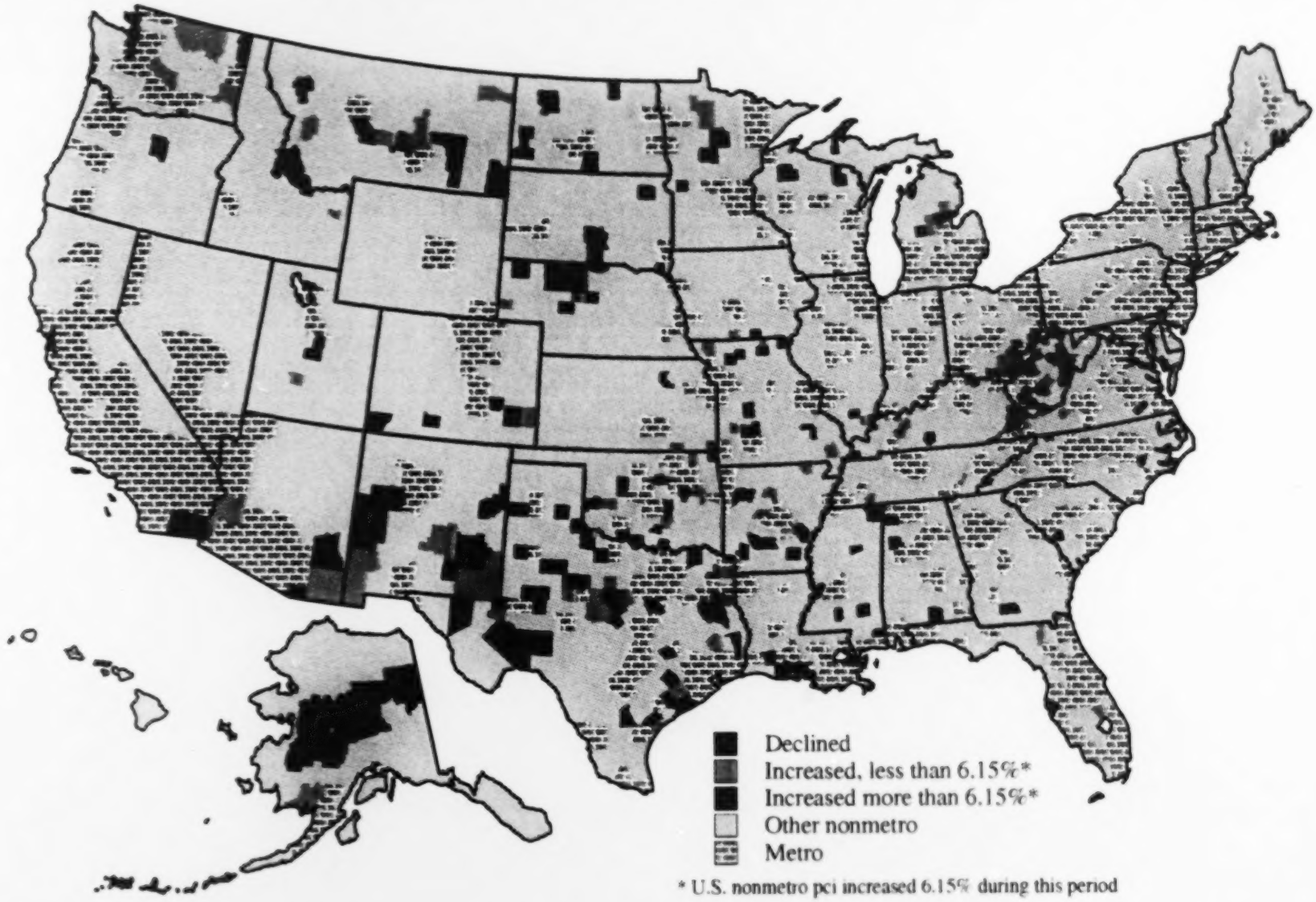
U.S. Bureau of the Census. 1996. *Income, Poverty, and Valuation of Noncash Benefits: 1994. Current Population Reports Consumer Income Series P60-189*. Washington, DC: U.S. Department of Commerce, Bureau of the Census.

Map 1. Change in per capita income, 1989-94, in persistent-poverty nonmetro counties



Data sources: Bureau of the Census STF3C, 1990; and Bureau of Economic Analysis Regional Economic Information System 1969-94 Income File

Map 2. Change in per capita income, 1989-94, in new high-poverty nonmetro counties
(i.e., nonmetro counties with 1989 poverty rate higher than 20 percent, but not classified as persistent-poverty counties)



* U.S. nonmetro pci increased 6.15% during this period

Data sources: Bureau of the Census STF3C, 1990; and Bureau of Economic Analysis Regional Economic Information System 1969-94 Income File

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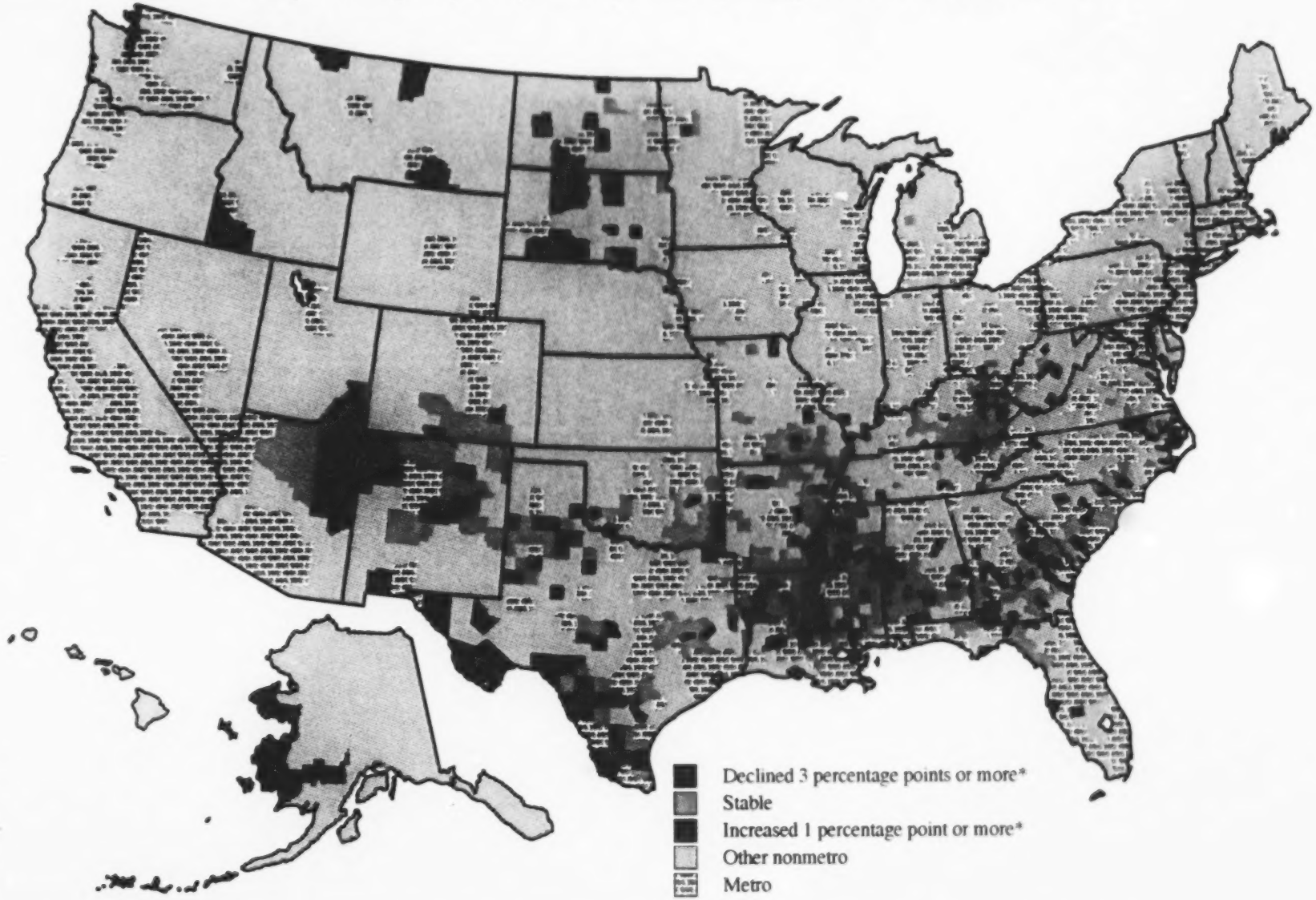
Map 3. Change in poverty rate in persistent-poverty nonmetro counties, 1989-93



*The methodology used to generate the 1993 estimates is believed to understate poverty rates by about one percentage point compared with the decennial census methodology.

Source: Prepared by ERS based on small-area income and poverty estimates (1993) and decennial census (1990) data from the Bureau of the Census

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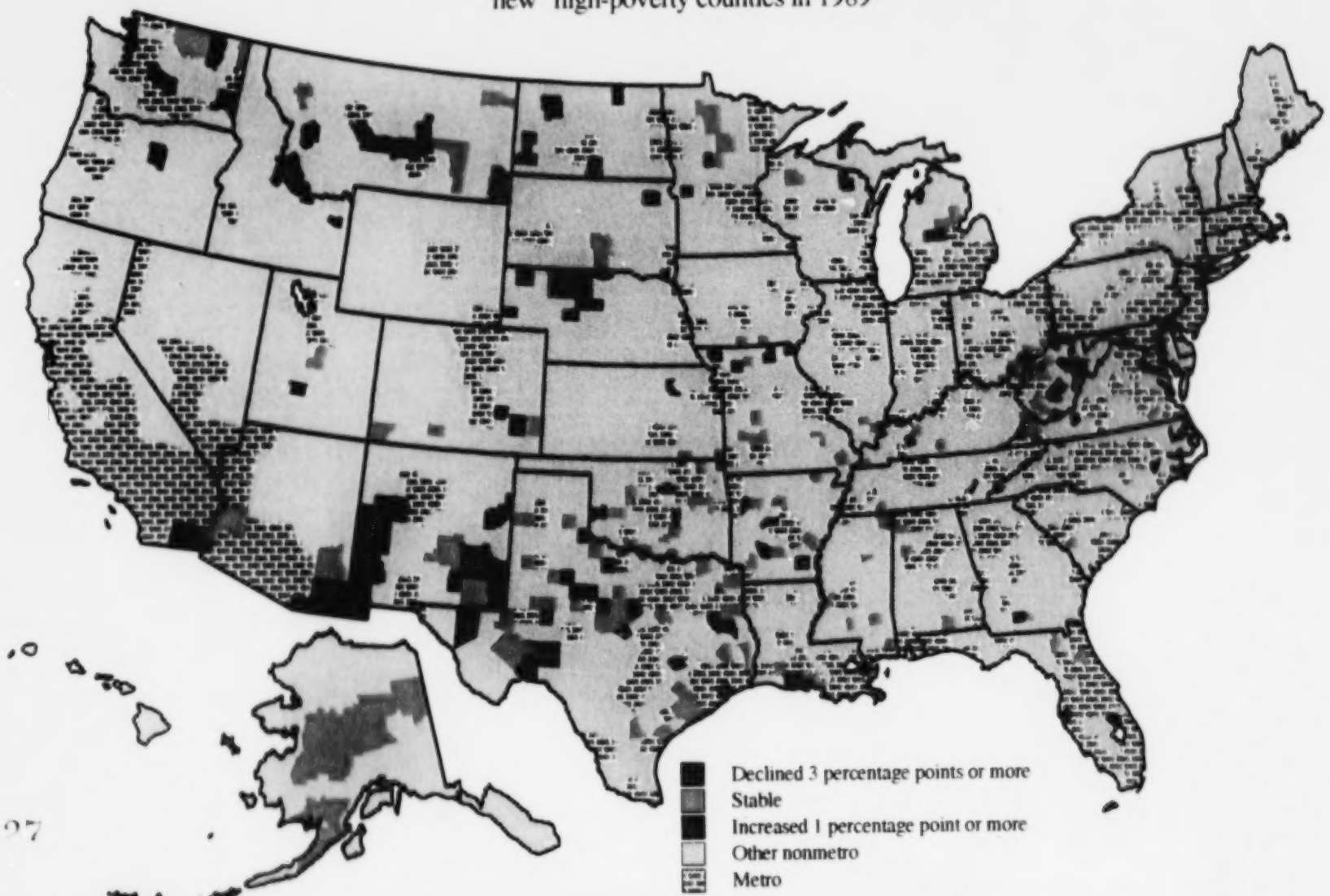
Map 4. Poverty rate change, 1989-93, in nonmetro counties classified as "new" high-poverty counties in 1989*



*New (in 1989) high-poverty counties had poverty rates higher than 20% in 1989 but less than 20% in at least one of the previous three decennial censuses.

Source: Prepared by ERS based on small-area income and poverty estimates (1993) and decennial census (1990) data from the Bureau of the Census.

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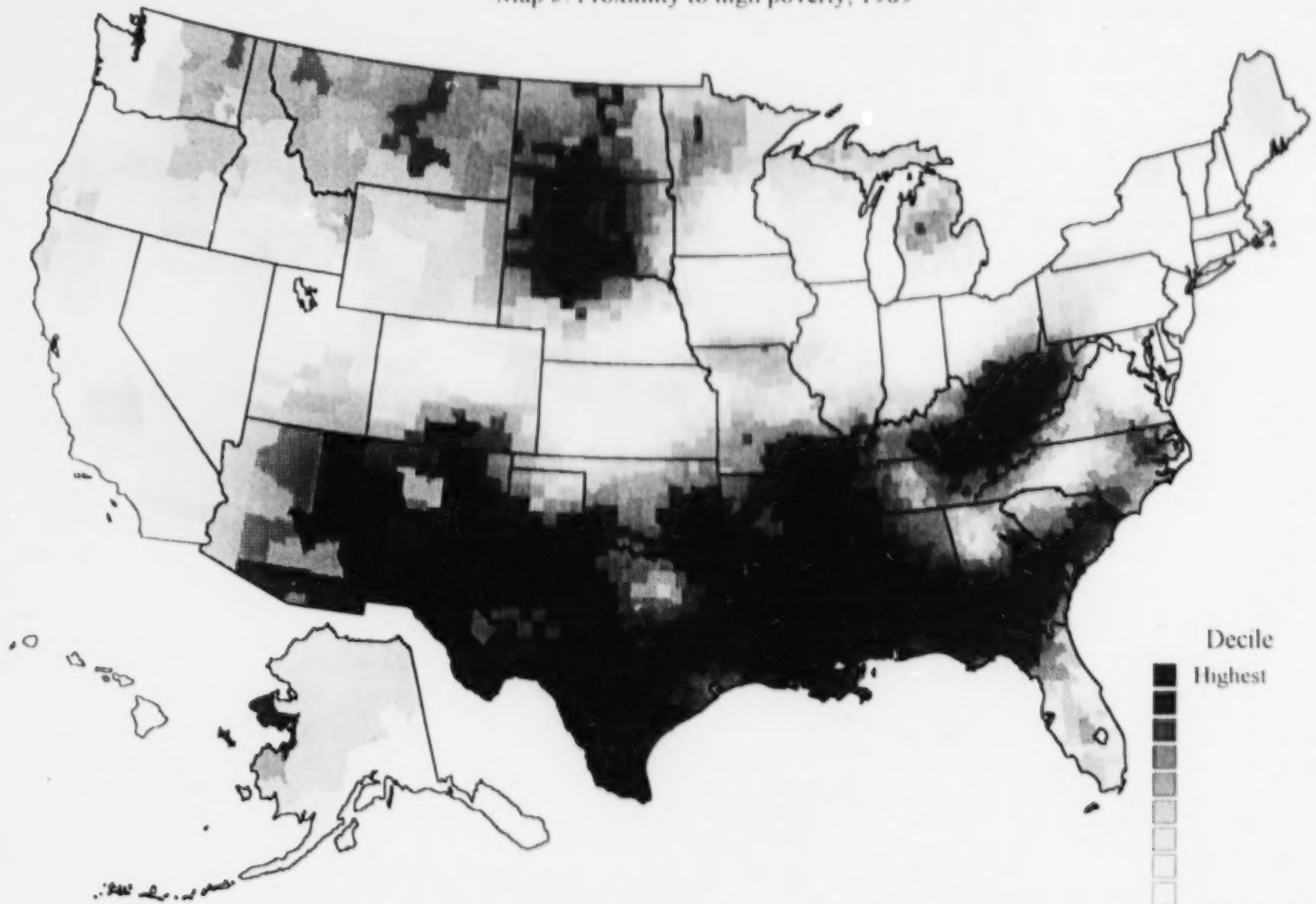
Map 5. Proximity to high poverty, 1989*



*Proximity to poverty is a measure of the average poverty rate of nearby counties. For a description of measure, please see text.

Source: Prepared by ERS based on data from the U.S. Bureau of the Census STF3C, 1990.

Table 1. Income and poverty characteristics of nonmetropolitan counties			
	Persistent-poverty(a)	New high-poverty(b)	Other nonmetro
Number of counties	535	232	1519
Poverty rate 1989 (%)	28.7	22.7	13.3
Per capita income 1989 (in 1994 dollars)	12,879	14,497	17,022
Per capita income 1994 (in 1994 dollars)	14,253	15,464	17,892
Per capita income growth 1989-94 (%)	10.7	6.7	5.1
Per capita income-change categories, 1989-94	- - - - - - - - percent of counties - - - - - - - -		
PCI declined	4.9	13.4	14.9
PCI increased 0 to 6.15%(c)	17.9	29.7	35.3
PCI increased 6.15 to 12.30%(c)	37.0	35.8	34.7
PCI increased more than 12.30%(c)	40.2	21.1	15.1
Total	100.0	100.0	100.0

NOTES:

Poverty rate, income, and income growth statistics in the top panel were calculated by aggregating data within each category of counties (i.e., they are equivalent to county means weighted by county population).

(a) Persistent-poverty counties had poverty rates higher than 20 percent in each decennial census: 1960, 1970, 1980, and 1990.

(b) New high-poverty counties had poverty rates higher than 20 percent in 1990, but lower than 20% in at least one of the previous three censuses.

(c) Nationally, nonmetro per capita income grew 6.15% from 1989 to 1994.

Data sources: Bureau of the Census Summary Tape File 3C, 1990; and Bureau of Economic Analysis Regional Economic Information System 1969-94 income file

Table 2. Poverty rates in nonmetro and persistent-poverty counties 1959-93				
Year	Nonmetro in 1963	Nonmetro in 1993	Nonmetro in 1963 and High-poverty in 1959	Nonmetro in 1993 and Persistent-poverty through 1989
	----------unweighted mean of county poverty rates (%)----------			
1959	36.6	37.4	40.5	56.9
1969	22.3	23.2	24.4	38.5
1979	16.6	17.3	17.8	27.6
1989	17.5	18.3	18.6	29.1
1993	17.0	17.6	18.0	27.4
Number of counties	2676	2274	2249	535

NOTES:

Persistent-poverty counties had poverty rates of 20 percent or more in each decennial census: 1960, 1970, 1980, and 1990.

Data sources: Bureau of the Census decennial censuses of population and housing 1950, 1960, 1970, 1980; and Bureau of the Census Small Area Income and Poverty Estimates, 1993

Table 3. Proximate poverty(a) and change in persistent-poverty status of nonmetro counties(b) over three decades

County poverty characteristics	1959-69	1969-79	1979-89
	- - - - - - unweighted mean of proximate poverty - - - - - - - - (number of counties)		
Remained in persistent-poverty status	45.5 (1295)	31.7 (652)	23.0 (542)
Escaped from persistent-poverty status	29.1 (954)	24.2 (568)	19.4 (104)
Not in persistent-poverty status at beginning of decade	20.1 (427)	15.6 (1239)	14.2 (1727)
Entered high-poverty status (poverty rate > 20%) for first time or returned to high-poverty status after escaping from persistent-poverty status in earlier decade(c)	20.3 (5)	19.1 (32)	17.3 (223)

NOTES:

Persistent-poverty counties had poverty rates of 20 percent or more in each decennial census: 1960, 1970, 1980, and 1990.

(a) Proximate poverty is a measure of the average poverty rate of nearby counties. See text for details of the measure.

(b) All counties that were nonmetro at the beginning of each decade are included in the analysis for that decade.

(c) These counties are also included in the "not in persistent-poverty status at beginning of decade" category.

Data sources: Bureau of the Census decennial censuses of population and housing 1950, 1960, 1970, 1980

Table 4. Spatial autocorrelation of poverty, and correlations of poverty rate with subsequent change in poverty rate and change in per capita income in nonmetropolitan counties and persistent-poverty counties(a)

	Nonmetro counties(a) (n=2274)			Persistent-poverty counties(a) (n=535)		
Period	Change in poverty rate (percentage points)	Change in real per capita income (percent)	Proximate poverty(b) at beginning of period	Change in poverty rate (percentage points)	Change in real per capita income (percent)	Proximate poverty(b) at beginning of period
	- - - - - - correlation with poverty rate at beginning of period - - - - -					
1959-69	-.77	n.a.	.902	-.59	n.a.	.723
1969-79	-.81	.36	.866	-.77	.42	.652
1979-89	-.12	.12	.819	-.07	-.02	.573
1989-93	-.41		.817	-.45		.580
1989-94		.30			.30	

NOTES:

(a) Constant sets of counties were used for these calculations based on metropolitan status in 1993 and persistent-poverty status in 1989. The results are quite robust, and very similar correlations are observed if a different set of counties is chosen in each decade based on the metropolitan status and persistent-poverty status at the beginning of the decade. Persistent-poverty counties had poverty rates of 20 percent or more in each decennial census: 1960, 1970, 1980, and 1990.

(a) Proximate poverty is a measure of the average poverty rate of nearby counties. See text for details of the measure. Correlation of poverty rate with proximate poverty is a measure of the spatial autocorrelation, or spatial clustering, of poverty.

Data sources: Bureau of the Census decennial censuses of population and housing 1950, 1960, 1970, 1980; Bureau of Economic Analysis Regional Economic Information System 1969-94 income file; Bureau of the Census Small Area Income and Poverty Estimates, 1993

Table 5. Poverty characteristics of nonmetro counties by persistent-poverty status over three decades			
County poverty characteristics	1959-69	1969-79	1979-89
Remained in persistent-poverty status through the end of the decade:			
Number of counties	1295	652	542
Poverty rate at beginning of decade	49.3	37.0	27.6
Change in poverty rate during decade	-17.9	-10.2	+1.5
Escaped from persistent-poverty status during decade:			
Number of counties	954	568	104
Poverty rate at beginning of decade	28.5	25.4	22.7
Change in poverty rate during decade	-13.5	-9.1	-4.9
Not in persistent-poverty status at beginning of decade:			
Number of counties	427	1239	1727
Poverty rate at beginning of decade	16.0	14.0	13.6
Change in poverty rate during decade	-4.7	-1.9	+1.2

NOTES:

1. All counties that were nonmetro at the beginning of each decade are included in the analysis for that decade.

2. Persistent-poverty counties are those that had poverty rates of 20 percent or more in 1959 and in each succeeding decennial census up until the time of measurement.

Data sources: Bureau of the Census decennial censuses of population and housing 1960, 1970, 1980, 1990

Table 6. Poverty and per capita income change categories of nonmetropolitan counties by ERS rural-urban category

Poverty/pci-change category	ERS rural-urban category					
	4	5	6	7	8	9
	number of counties (percent of row)					
Persistent-poverty with declining pci (n=26)	0 (0)	0 (0)	3 (11.5)	6 (23.1)	3 (11.5)	14 (53.8)
Persistent-poverty with pci growth higher than the national nonmetro mean (n=413)	9 (2.2)	10 (2.4)	113 (27.4)	126 (30.5)	43 (10.4)	112 (27.1)
New high-poverty with declining pci (n=31)	2 (6.5)	1 (3.2)	6 (19.4)	7 (22.6)	7 (22.6)	8 (25.8)
New high-poverty with pci growth higher than the national mean (n=132)	7 (5.3)	6 (4.5)	40 (30.3)	42 (31.8)	9 (6.8)	28 (21.2)
All nonmetro counties (n=2286)	133 (5.8)	113 (4.9)	608 (26.6)	654 (28.6)	248 (10.8)	530 (23.2)

NOTES:

ERS rural-urban categories of nonmetro counties are as follows:

4 - Urban population of 20,000 or more adjacent to a metropolitan area
5 - Urban population of 20,000 or more not adjacent to a metropolitan area
6 - Urban population of 2,500 to 19,999 adjacent to a metropolitan area
7 - Urban population of 2,500 to 19,999 not adjacent to a metropolitan area
8 - No place with population of 2,500 or more, adjacent to a metropolitan area
9 - No place with population of 2,500 or more, not adjacent to a metropolitan area

Persistent-poverty counties had poverty rates of 20 percent or more in each decennial census: 1960, 1970, 1980, and 1990. New high-poverty counties had poverty rates higher than 20 percent in 1990, but lower than 20 percent in at least one of the previous three censuses.

Per-capita income change from 1989-94 was adjusted for inflation using the personal consumption expenditure index.

Data sources: Bureau of the Census Summary Tape File 3C, 1990; and Bureau of Economic Analysis Regional Economic Information System 1969-94 income file

Appendix Table 1. Selected characteristics of persistent-poverty counties* in which per capita income declined from 1989 to 1994 (ordered by PCI change 1989-94)

County	Poverty rate 1989 (%)	PCI 1994 ($)	PCI change 1989-94 (%)	Minority share of poor** (%)		Net natural increase 1990-94 (%)	Ag, forestry, fishery employ share 1990 (%)
Hudspeth TX	38.9	10,048	-18.2	89.4	(H)	5.0	25.6
Blaine MT	27.7	12,707	-14.1	67.2	(N)	3.2	30.1
Edwards TX	41.7	13,038	-10.8	69.1	(H)	3.0	36.5
Saguache CO	30.6	13,829	-8.7	61.8	(H)	4.5	26.0
Wade-Hampton Census Area AK	31.0	10,633	-8.6	99.0	(N)	13.6	.6
Owyhee ID	24.7	13,401	-7.1	29.9	(H)	4.0	40.2
" "				5.7	(N)		
Union NM	21.0	17,151	-5.9	57.0	(H)	-.1	24.5
Luna NM	31.5	12,070	-5.4	68.8	(H)	2.9	11.0
Glacier MT	35.7	13,545	-5.3	82.0	(N)	5.0	12.1
Hardee FL	22.8	16,812	-3.9	43.0	(H)	4.9	24.0
Wright MO	25.3	12,188	-3.0			.7	16.0
Hamilton FL	27.8	12,357	-2.7	65.7	(B)	2.0	8.5
Houston TX	25.6	16,521	-2.3	57.3	(B)	0.0	8.6
Hickory MO	21.9	11,679	-2.2			-3.3	16.3
Dixie FL	27.4	12,035	-1.9	11.9	(B)	1.5	6.5
Roosevelt NM	26.9	14,281	-1.7	51.3	(H)	4.2	13.8
Coal OK	27.4	11,248	-1.1	18.6	(N)	.4	14.0
Wayne MO	29.0	11,526	-1.0			-.5	4.7
Long GA	23.7	10,472	-1.0	40.3	(B)	5.9	6.5
McIntosh GA	22.3	12,369	-.8	61.2	(B)	3.1	4.8
Costilla CO	34.6	14,444	-.5	86.6	(H)	1.8	16.0
Sharp AR	21.8	12,788	-.3			-2.0	10.2
Ouachita AR	21.2	15,056	-.2	67.9	(B)	.7	1.8
Madison AR	20.1	14,856	-.1			2.0	16.0
Bacon GA	24.1	13,953	-.1	36.3	(B)	1.2	5.8
McPherson SD	21.5	16,633	-.1			-.9	34.3
Nonmetro average	17.7	16,982	+6.2	15.2	All	1.6	10.8

*Persistent-poverty counties had poverty rates higher than 20 percent in the four census years 1960, 1970, 1980, and 1990.

**Race/ethnicity share of poor not shown if less than 5 percent. Identification of minority group shown in parenthesis: (B) Black, (H) Hispanic, (N) Native American

Data sources: Bureau of the Census Summary Tape File 3C, 1990; Bureau of Economic Analysis Regional Economic Information System 1969-94 income file; and Bureau of the Census Population Estimates file 1990-95.

Appendix Table 2. Selected characteristics of new high-poverty counties* in which per capita income declined from 1989 to 1994 (ordered by PCI change 1989-94)

County	Poverty rate 1989 (%)	PCI 1994 ($)	PCI change 1989-94 (%)	Minority share of poor** (%)		Net natural increase 1990-94 (%)	Ag, forestry, fishery employ share 1990 (%)
McPherson NE	33.2	15,067	-23.5			-.5	66.5
Imperial CA	23.8	14,302	-18.9	81.0	H	6.8	17.4
Billings ND	29.6	14,353	-13.6			3.8	43.2
Glascock TX	22.3	18,535	-10.0	56.7	H	5.7	51.6
Cherry NE	22.2	14,608	-9.3	10.1	N	1.0	34.2
Quay NM	25.1	14,573	-9.3	48.7	H	1.5	9.3
Blaine NE	23.0	17,433	-8.4			4.5	53.4
Keya Paha NE	25.7	15,211	-8.1			1.7	60.4
Crowley CO	23.8	11,333	-7.4	36.5	H	.2	22.1
Rio Grande CO	23.8	17,476	-6.1	64.9	H	2.2	17.1
Matagorda TX	20.7	16,368	-5.6	42.8	H	3.8	7.3
" "				25.5	B		
Morgan OH	21.2	14,995	-4.5	6.7	B	.7	6.6
Stevens MN	20.6	17,197	-4.1			0.0	14.9
Carter MT	27.4	16,270	-3.5			-.9	61.7
Culberson TX	29.8	10,795	-2.8	88.6	H	4.4	10.9
Dallas MO	23.2	12,807	-2.5			.8	15.6
Santa Cruz AZ	26.4	12,566	-2.4	92.3	H	8.3	4.5
Wheeler OR	20.9	16,735	-2.1			-2.4	30.3
Sanpete UT	20.2	11,947	-1.7	7.8	H	3.3	14.1
Cotton OK	20.9	15,861	-1.7	12.8	H	.1	12.2
" "				10.8	N		
Arenac MI	20.6	15,413	-1.5			.3	5.3
Cibola NM	33.6	10,793	-1.2	53.8	N	5.0	2.0
" "				34.4	H		
Golden Valley MT	27.5	17,460	-.9			3.5	51.5
Catron NM	25.6	13,756	-.7	28.5	H	1.2	29.4
Gallatin IL	21.4	17,633	-.5			-1.1	14.3
Rusk TX	20.1	16,486	-.5	49.8	B	.7	3.8
Polk MO	20.3	14,128	-.3			.7	11.4
Chaves NM	22.4	15,675	-.2	57.7	H	2.8	6.6
Franklin IL	20.8	15,650	-.2			-1.0	2.8
Benton MO	20.2	13,080	-.2			-2.9	10.6
Rosebud MT	20.4	16,698	-.1	62.6	N	4.7	11.9
Nonmetro average	17.7	16,982	+6.2	15.2	All	1.6	10.8

*New high-poverty counties had 1989 poverty rates higher than 20 percent, but are not classified as persistent-poverty counties.

**Race/ethnicity share of poor not shown if less than 5 percent. Identification of minority group shown in parenthesis: (B) Black, (H) Hispanic, (N) Native American

Data sources: Bureau of the Census Summary Tape File 3C, 1990; Bureau of Economic Analysis Regional Economic Information System 1969-94 income file; and Bureau of the Census Population Estimates file 1990-95.